(FILE 'HOME' ENTERED AT 13:25:01 ON 19 JUN 2003)

FILE 'REGISTRY' ENTERED AT 13:25:06 ON 19 JUN 2003

L1 STRUC L2 12 S L1

L3 164 S L1 FUL

FILE 'CAPLUS' ENTERED AT 13:27:34 ON 19 JUN 2003

L4 36 S L3

L5 19 S L4 AND PY<1999 L6 5 S L4 AND PY=1999

=> fil reg

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SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
134.97
284.53

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION

CA SUBSCRIBER PRICE -18.23 -18.23

FILE 'REGISTRY' ENTERED AT 13:40:20 ON 19 JUN 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 JUN 2003 HIGHEST RN 532924-24-6 DICTIONARY FILE UPDATES: 17 JUN 2003 HIGHEST RN 532924-24-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d l1

L1 HAS NO ANSWERS

STR

REP G1=(0-3) CH NODE ATTRIBUTES:

NSPEC IS C AT 10 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

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1 WO200123379/PN
                    (WO2001023379/PN)
=> d bib
      ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
Ll
AN
      2001:246563 CAPLUS
DN
      134:266198
      Preparation of N-arylsulfonyl amino acid derivatives as c-Jun N-terminal
ΤТ
      kinase inhibitors
      Arkinstall, Stephen
IN
PA
      Applied Research Systems ARS Holding N.V., Neth. Antilles
SO
      Eur. Pat. Appl., 29 pp.
      CODEN: EPXXDW
DT
      Patent
      English
LA
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                                                  APPLICATION NO. DATE
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                                                   WO 2000-IB1382
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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               IE, SI, LT, LV, FI, RO, MK, CY, AL
      JP 2003510320
                                                   JP 2001-526531
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                                                                     20000928
PRAI EP 1999-810871
                           Α
                                 19990928
      WO 2000-IB1382
                           W
                                 20000928
      MARPAT 134:266198
                THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 15
                ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> analyze l1
ENTER ANSWER NUMBER OR RANGE (1-):1
ENTER DISPLAY CODE (TI) OR ?:rn
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L2
                                        17 TERMS
=> fil reg
COST IN U.S. DOLLARS
                                                          SINCE FILE
                                                                              TOTAL
                                                                ENTRY
                                                                           SESSION
FULL ESTIMATED COST
                                                                12.85
                                                                              13.06
FILE 'REGISTRY' ENTERED AT 15:37:35 ON 19 JUN 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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COPYRIGHT (C) 2003 American Chemical Society (ACS)
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Property values tagged with IC are from the ZIC/VINITI data file

provided by InfoChem.

=> s wo200123379/pn

STRUCTURE FILE UPDATES: 18 JUN 2003 HIGHEST RN 533863-98-8 DICTIONARY FILE UPDATES: 18 JUN 2003 HIGHEST RN 533863-98-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s 12

L3 17 L2

=> d scan

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzamide, 4-chloro-N-[[5-[[[2-[[2-[[5-nitro-2pyridinyl)amino]ethyl]amino]-2-oxoethyl]amino]sulfonyl]-2-thienyl]methyl](9CI)

MF C21 H21 Cl N6 O6 S2

PAGE 1-A

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):16

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN 2-Thiophenemethanamine, N, N-di-2-propenyl- (9CI)

MF C11 H15 N S

$$\begin{array}{c} \text{CH}_2-\text{CH} \Longrightarrow \text{CH}_2 \\ | \\ \text{CH}_2-\text{N-CH}_2-\text{CH} \Longrightarrow \text{CH}_2 \end{array}$$

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN 2-Thiophenesulfonyl chloride, 5-[[(4-chlorobenzoyl)amino]methyl]- (9CI)

MF C12 H9 C12 N O3 S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzamide, 4-chloro-N-[[5-[[[2-oxo-2-[[2-[[3-(trifluoromethyl)-2-

pyridinyl]amino]ethyl]amino]ethyl]amino]sulfonyl]-2-thienyl]methyl]- (9CI)

MF C22 H21 Cl F3 N5 O4 S2

PAGE 1-A

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN 2-Thiophenesulfonyl chloride, 5-[(di-2-propenylamino)methyl]- (9CI)

MF C11 H14 C1 N O2 S2

$$\begin{array}{c|c}
CH_2-CH \longrightarrow CH_2\\
C1-S & CH_2-N-CH_2-CH \longrightarrow CH_2\\
\end{array}$$

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN 1,2-Ethanediamine, N-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]- (9CI)

MF C8 H9 Cl F3 N3

CI COM

F<sub>3</sub>C 
$$N$$
  $NH-CH2-CH2-NH2$ 

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Benzamide, 4-chloro-N-[[5-[[[2-oxo-2-[[2-[[5-(trifluoromethyl)-2-pyridinyl]amino]ethyl]amino]ethyl]amino]sulfonyl]-2-thienyl]methyl]- (9CI)

MF C22 H21 Cl F3 N5 O4 S2

PAGE 1-A

$$\begin{array}{c|c} & \circ & \circ & \circ \\ \parallel & - & \circ \\ - & \circ & - \\ - & \circ &$$

PAGE 1-B

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN 1-Propene, 3-bromo- (9CI)

MF C3 H5 Br

CI COM

 $Br-CH_2-CH=-CH_2$ 

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- IN Kinase (phosphorylating), gene c-jun protein N-terminal, 2 (9CI)
- MF Unspecified
- CI MAN

#### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

- L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- IN Benzamide, 4-chloro-N-(2-thienylmethyl)- (9CI)
- MF C12 H10 Cl N O S

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- IN Benzoyl chloride, 4-chloro- (9CI)
- MF C7 H4 C12 O

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- IN Kinase (phosphorylating), gene c-jun protein N-terminal, 3 (9CI)
- MF Unspecified
- CI MAN

# \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

- L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS
- MF C18 H21 Cl N2 O5 S2

$$\begin{array}{c|c} O & O & O \\ \parallel & \parallel & \\ \text{t-BuO-C-CH}_2\text{-NH-S} & S & \parallel & \\ O & & \parallel & \\ O & & & \\ \end{array}$$

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Glycine, 1,1-dimethylethyl ester, hydrochloride (9CI)

MF C6 H13 N O2 . Cl H

● HCl

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

MF C22 H20 Cl2 F3 N5 O4 S2

PAGE 1-A

PAGE 1-B

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN Glycine, N-[[5-[[(4-chlorobenzoyl)amino]methyl]-2-thienyl]sulfonyl]- (9CI) MF C14 H13 Cl N2 O5 S2

$$\begin{array}{c|c} & & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & &$$

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 17 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN 2-Thiophenemethanamine (9CI)

MF C5 H7 N S

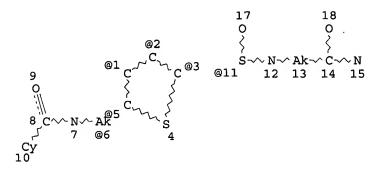
CI COM

$$\text{CH}_2\text{-NH}_2$$

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> d l1 L1 HAS NO ANSWERS L1 STR



VPA 6-1/5 U
VPA 11-2/3 U
NODE ATTRIBUTES:
NSPEC IS C AT 15
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

=> s l1 ful FULL SEARCH INITIATED 15:48:30 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 10409 TO ITERATE

100.0% PROCESSED 10409 ITERATIONS SEARCH TIME: 00.00.01

L3 15 SEA SSS FUL L1

15 ANSWERS

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=> s 13
             9 L3
L4
=> d bib abs hitstr 1-9
L4
     ANSWER 1 OF 9 CAPLUS COPYRIGHT 2003 ACS
     2002:521684 CAPLUS
AN
DN
     137:88483
ΤI
     Hydrophobic polyamine analogs and methods for their use
     Burns, Mark Robert; Graminski, Gerard F.; Banduir, Nand
IN
     Oridigm Corporation, USA
PA
     PCT Int. Appl., 91 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                                           _____
                            20020711
                                           WO 2002-US347
PΙ
     WO 2002053519
                      A2
     WO 2002053519
                      A3
                            20030313
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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PRAI US 2001-260415P
                            20010108
OS
    MARPAT 137:88483
     The invention provides polyamine analogs and derivs. contg. a hydrophobic
AB
     region and a polyamine region, as well as methods and compns. for their
     use. The compds. of the invention can be used e.g. to treat cancer
     osteoporosis, asthma, etc.
TT
     330162-58-8
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (hydrophobic polyamine analogs and use)
RN
     330162-58-8 CAPLUS
CN
     Benzamide, N-[[5-[[[(5S)-5-amino-6-[[3-[[4-[(3-
     aminopropyl) amino] butyl] amino] propyl] amino] -6-oxohexyl] amino] sulfonyl] -2-
     thienyl]methyl]-4-chloro- (9CI) (CA INDEX NAME)
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Absolute stereochemistry.

EP 2001-946044 20010531

AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

Ι

```
L4
      ANSWER 2 OF 9 CAPLUS
                                    COPYRIGHT 2003 ACS
AN
      2001:886056 CAPLUS
DN
      136:15226
TI
      Novel polyamine transport-inhibiting polyamine analogues as therapeutic
      and diagnostic agents
      Vermeulin, Nicolaas M. J.; O'day, Christine L.; Webb, Heather K.; Burns,
IN
      Mark R.; Bergstrom, Donald E.
PA
      Oridigm Corporation, USA
so
      PCT Int. Appl., 102 pp.
      CODEN: PIXXD2
DT
      Patent
      English
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      PATENT NO.
                            KIND
                                    DATE
                                                        APPLICATION NO.
PI
      WO 2001092218
                             A2
                                    20011206
                                                        WO 2001-US17795 20010531
      WO 2001092218
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                                    20030327
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                 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
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```

20030611

A2

EP 1317424

GI

AB Novel "bispolyamine" inhibitor compds. of polyamine transport are disclosed. These compds. are useful pharmaceutical agents for treating diseases where it is desired to inhibit polyamine transport or other polyamine binding proteins, for example cancer and post-angioplasty

injury. These compds. display desirable activities both for diagnostic and research assays and therapy. Most of the spermine dimers that have been tested provided very good Ki for transport inhibition with values under 75 nM. ORI 1236 (I) was the most potent inhibitor with a Ki of 22 nM. The results were generally mirrored in the growth inhibition assay. All of the compds. were synergistic with difluoromethylornithine, a polyamine synthesis inhibitor, with IC50 values of 10 .mu.M or less.

IT 220221-41-0 220221-56-7 287968-56-3

330162-48-6 330162-52-2

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(novel polyamine transport-inhibiting polyamine analogs as therapeutic and diagnostic agents)

RN 220221-41-0 CAPLUS

CN Benzamide, N-[[5-[[[6-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-6-oxohexyl]amino]sulfonyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 220221-56-7 CAPLUS

CN Benzamide, 4-chloro-N-[[5-[[(6-oxo-7,11,16,20-tetraazadocos-1-yl)amino]sulfonyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

EtNH- 
$$(CH_2)_3$$
-NH-  $(CH_2)_4$ -NH-  $(CH_2)_3$ -NH-C-  $(CH_2)_5$ -NH-S-  $(C$ 

PAGE 1-B

RN 287968-56-3 CAPLUS

CN Benzamide, N-[[5-[[6-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-6-oxohexyl]amino]sulfonyl]-2-thienyl]methyl]-4-chloro- (9CI) (CA INDEX NAME)

$$_{\text{H}_{2}\text{N}-\text{ (CH}_{2})_{3}-\text{NH}-\text{ (CH}_{2})_{4}-\text{NH}-\text{ (CH}_{2})_{3}-\text{NH}-\text{C- (CH}_{2})_{5}-\text{NH}-\overset{\text{O}}{\underset{||}{\text{II}}}$$

#### PAGE 1-B

$$-CH_2-NH-C$$

RN 330162-48-6 CAPLUS

CN Benzamide, N-[[5-[[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-3-oxopropyl]amino]sulfonyl]-2-thienyl]methyl]-4-chloro- (9CI) (CA INDEX NAME)

## PAGE 1-A

$$_{\text{H}_{2}\text{N}-\text{ (CH}_{2})_{3}-\text{ NH}-\text{ (CH}_{2})_{4}-\text{ NH}-\text{ (CH}_{2})_{3}-\text{ NH}-\text{ C}-\text{ CH}_{2}-\text{ CH}_{2}-\text{ NH}-\text{ S}$$

## PAGE 1-B

RN 330162-52-2 CAPLUS

CN Benzamide, N-[[5-[[[(1S)-1-[[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]carbonyl]-2-methylpropyl]amino]sulfonyl]-2-thienyl]methyl]-4-chloro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$^{\text{H}_2\text{N}}$$
  $^{\text{CH}_2)_3}$   $^{\text{H}}$   $^{\text{CH}_2)_4}$   $^{\text{H}}$   $^{\text{CH}_2)_3}$   $^{\text{H}}$   $^{\text{O}}$   $^{\text{O}}$ 

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ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS
L4
AN
      2001:730681 CAPLUS
DN
       135:272682
       Polyamine analogues as cytotoxic agents
TI
IN
      Burns, Mark R.
PA
       Oridigm Corporation, USA
       PCT Int. Appl., 57 pp.
SO
       CODEN: PIXXD2
DT
       Patent
LA
       English
FAN.CNT 1
                                                             APPLICATION NO.
       PATENT NO.
                               KIND
                                       DATE
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                                                             WO 2001-US40360 20010323
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                                        20011004
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      WO 2001072685
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                            EP 2001-925146 20010323
      EP 1296931
                                       20030402
                                A2
            R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                  IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                             US 2002-239521
                                                                                     20020923
      US 2003045755
                                       20030306
                                A1
PRAI US 2000-191839P
                                       20000324
                                Ρ
      WO 2001-US40360
                                W
                                        20010323
OS
      MARPAT 135:272682
GI
```

AB Novel cytotoxic polyamine analogs are disclosed. These analogs are useful pharmaceutical agents for treating diseases where it is desired to inhibit cell growth and/or proliferation, for example cancer and post-angioplasty injury. Thus, I (ORI 1313) is prepd. and inhibited A375 melanoma growth

36% in mice.

IT

330163-38-7P 330163-49-0P 330163-51-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of polyamine analogs as cytotoxic agents)

RN 330163-38-7 CAPLUS

PAGE 1-A

PAGE 1-B

$$- (CH2)4 - NH - (CH2)3 - NH - C - (CH2)4 - NH - S - CH2 - NH - C - CH2 -$$

PAGE 1-C

RN 330163-49-0 CAPLUS

CN 2,6,11,15-Tetraazaheneicosanoic acid, 21-[[[5-[[(4-chlorobenzoyl)amino]methyl]-2-thienyl]sulfonyl]amino]-16-oxo-, phenylmethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 330163-51-4 CAPLUS

CN 2,6,11,15-Tetraazaheneicosanoic acid, 21-[[[5-[[(4-

chlorobenzoyl)amino]methyl]-2-thienyl]sulfonyl]amino]-16-oxo-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-B

ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS L4

AN 2001:283950 CAPLUS

134:295844 DN

Preparation of amino lactam sulfonamides as inhibitors of A.beta.-protein ΤI production

Thompson, Lorin Andrew; Han, Amy Qi IN

PA Du Pont Pharmaceuticals Company, USA

SO PCT Int. Appl., 194 pp.

CODEN: PIXXD2

DTPatent

LΑ English

GI

FAN.CNT 2																			
	PAT	CENT :	NO.		KI	ND	DATE			A)	PPLI	CATI	ο.	DATE					
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	TJ, TM																		
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			PT,	SE															
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	IE, SI,				LT,	LV,	FI,	RO,	CY										
	US	6503	901		B1 20030107				US 2000-684718						20001007				
PRAI	US 1999-158565P			P 19991008															
	WO	2000	-US2	7666	W		2000	1007											
os	MAI	RPAT	134:	29584	14														

$$Q \xrightarrow{S^2} N \xrightarrow{R^5 R^5?} N \xrightarrow{R^6} O \\ N \\ N \\ N \\ N \\ X \xrightarrow{Y} Z$$

AB The title compds. [I; Q = alkyl, cycloalkyl, etc.; R2 = H, alkyl, alkoxyalkyl, etc.; R5 = H, alkyl, alkoxy, etc.; R5a = H, alkyl; R6 = H, alkyl, aryl, etc.; ring B = 6-8 membered (un)satd. (un)substituted lactam which optionally contains heteroatom; W = (CR8R8a)p; p = 0-4; R8, R8a = H, F, alkyl, etc.; X = a bond, aryl, cycloalkyl, etc.; Y = a bond, alkylene, etc.; Z = H, alkyl, alkenyl, etc.] which inhibit the processing of amyloid precursor protein and, more specifically, inhibit the prodn. of A.beta.-peptide, thereby acting to prevent the formation of neurol. deposits of amyloid protein, were prepd. E.g., a 3-step synthesis of II was given. More particularly, the present invention relates to the treatment of neurol. disorders related to .beta.-amyloid prodn. such as Alzheimer's disease and Down's Syndrome. Also, method for inhibiting .gamma.-secretase activity was claimed.

IT 334870-26-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amino lactam sulfonamides as inhibitors of A. beta. -protein prodn.)

RN 334870-26-7 CAPLUS

CN Benzamide, N-[[5-[[(1S)-1-[[(2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)amino]carbonyl]-3-methylbutyl]amino]sulfonyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS AN 2001:283935 CAPLUS DN 134:311233 Amino lactam sulfonamides as inhibitors of amyloid-.beta. protein TI production IN Thompson, Lorin Andrew Du Pont Pharmaceuticals Company, USA PA PCT Int. Appl., 161 pp. SO CODEN: PIXXD2 DT Patent English T.A FAN.CNT 2 APPLICATION NO. DATE KIND DATE PATENT NO. \_\_\_\_\_\_ \_\_\_\_\_ 20010419 WO 2000-US27665 20001007 WO 2001027091 PΙ A1 W: AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE 20020717 EP 2000-970626 20001007 EP 1222176 Α1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY US 2000-684718 20001007 US 6503901 B1 20030107 PRAI US 1999-158565P Р 19991008 WO 2000-US27665 W 20001007

$$Q \xrightarrow{O} R^{5} R^{5}? R^{6} O \\ N \xrightarrow{||} N \xrightarrow{||} N \xrightarrow{W-X-Y-Z}$$

$$R^{2} O \qquad I$$

MARPAT 134:311233

OS GI

This invention relates to prepn. of novel lactams, particularly benzo[e][1,4]diazepines (I) [wherein Q = (un)substituted (cyclo)alkyl, alkenyl, alkynyl, carbocyclyl, aryl, or heterocyclyl; R2 = H or (un)substituted (alkoxy)alkyl, carbocyclyl(methyl), aryl(methyl), arylethyl, or heterocyclyl; R5 and R5a combine to form a 3-7 membered (un)substituted cycloalkyl or benzo-fused ring; R6 = H or (un)substituted alkyl, carbocyclyl, or aryl; ring B = 6-8 membered (un)substituted lactam, optionally contg. N, NH, NR10, O, S, S0, or S02; R10 = H, acyl, carboxy (ester), carbamoyl, sulfamoyl, (un)substituted alkyl, aryl, carbocyclyl, heterocyclyl, etc.; W = (CR8R8a)p; p = 0-4; R8 and R8a = independently H, F, (cyclo)alkyl, alkenyl, or alkynyl; X = a bond or (un)substituted aryl, cycloalkyl, carbocycyl, or heterocyclyl; Y = a bond or (CR9R9a)tV(CR9R9a)u; R9 and R9a = independently H, F, or (cycloalkyl); t and u = independently 0-3; V = a bond, CO, O, S, SO, SO2, CO2, OCO or

(un) substituted NH, CONH, NHCO, NHCO2, SO2NH, NHSO, or SONH; Z = H or (un) substituted alkyl, alkenyl, alkynyl, aryl, carbocyclyl, or heterocyclyl] and their pharmaceutical compns. These novel compds. inhibit the processing of amyloid precursor protein and, more specifically, inhibit the prodn. of amyloid-.beta. (A.beta.) peptide, thereby acting to prevent the formation of neurol. deposits of amyloid protein (no data). More particularly, the present invention relates to the treatment of neurol. disorders related to .beta.-amyloid prodn., such as Alzheimer's disease and Down's Syndrome (no data). For example, 3-amino-1-methyl-5-phenyl-1,3-dihydrobenzo[e][1,4]diazepin-2-one was coupled with N-Boc-L-leucine, deprotected using TFA, and coupled with 3,5-dimethylisoxazole-4-sulfonyl chloride to give II.

IT 334870-26-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amino lactam sulfonamides as inhibitors of a.beta. protein prodn.)

RN 334870-26-7 CAPLUS

CN Benzamide, N-[[5-[[(1S)-1-[[(2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)amino]carbonyl]-3-methylbutyl]amino]sulfonyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS
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AN 2001:246563 CAPLUS

DN 134:266198

TI Preparation of N-arylsulfonyl amino acid derivatives as c-Jun N-terminal kinase inhibitors

IN Arkinstall, Stephen

PA Applied Research Systems ARS Holding N.V., Neth. Antilles

SO Eur. Pat. Appl., 29 pp. CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

APPLICATION NO. PATENT NO. KIND DATE DATE --------------ΡI 20010404 EP 1999-810871 19990928 EP 1088815 Α1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO WO 2000-IB1382 20000928 WO 2001023379 A1 20010405 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 2000-960922 20000928 20020703 EP 1218375 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL JP 2003510320 T2 20030318 JP 2001-526531 20000928 PRAI EP 1999-810871 Α 19990928 W 20000928 WO 2000-IB1382 MARPAT 134:266198 os GΙ

AB RC(:X)NR1(CH2)nZSO2NR2CR3R4CONR5R6 [I; R = (un)substituted (hetero)aryl; R1,R2,R5 = H or (un)substituted alkyl; RR1 = atoms to complete a ring; R3,R4 = H, NH2, alkyl, alkoxy, amino acid residue, etc.; R2R4 = atoms to complete a ring; R6 = H, (un)substituted alkyl, (hetero)aryl, etc.; NR5R6 = heterocyclyl; X = O or S; Z = (un)substituted (hetero)aryene; n = 0-5] were prepd. Thus, 2-thiophenemethanamine was amidated by 4-ClC6H4COCl and the chlorosulfonated product amidated by H2NCH2CO2CMe3 to give 4-ClC6H4CONHCH2ZSO2NHCH2CO2H (Z = thiophene-2,5-diyl) which was amidated by N-(3-chloro-5-trifluoromethyl-2-pyridyl)ethylenediamine to give title compd. II. Data for biol. activity of I were given.

IT 332082-82-3P 332082-83-4P 332082-84-5P 332082-85-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-arylsulfonyl amino acid derivs. as c-Jun N-terminal kinase inhibitors)

RN 332082-82-3 CAPLUS

CN Benzamide, 4-chloro-N-[[5-[[[2-[[2-[[3-chloro-5-(trifluoromethyl)-2-pyridinyl]amino]ethyl]amino]-2-oxoethyl]amino]sulfonyl]-2-thienyl]methyl]-(9CI) (CA INDEX NAME)

PAGE 1-A

RN 332082-83-4 CAPLUS

CN Benzamide, 4-chloro-N-[[5-[[[2-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-2-oxoethyl]amino]sulfonyl]-2-thienyl]methyl]-(9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c|c} & \circ & \circ & \circ \\ \parallel & - \text{NH} - \text{CH}_2 - \text{C} - \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{CH}_2 - \text{CH}_2$$

PAGE 1-B

RN 332082-84-5 CAPLUS

CN Benzamide, 4-chloro-N-[[5-[[[2-oxo-2-[[2-[[3-(trifluoromethyl)-2-pyridinyl]amino]ethyl]amino]ethyl]amino]sulfonyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 332082-85-6 CAPLUS

CN Benzamide, 4-chloro-N-[[5-[[[2-oxo-2-[[2-[[5-(trifluoromethyl)-2-pyridinyl]amino]ethyl]amino]ethyl]amino]sulfonyl]-2-thienyl]methyl]- (9CI)

PAGE 1-A

PAGE 1-B

# RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS

AN 2001:207925 CAPLUS

DN 134:237682

TI Novel polyamine analogues as therapeutic and diagnostic agents

IN Vermeulin, Nicholaas M. J.; O'Day, Christine L.; Webb, Heather K.; Burns,
Mark R.; Bergstrom, Donald E.

PA Oridigm Corporation, USA

SO Eur. Pat. Appl., 140 pp. CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PI

P	ATENT	NO.		KI	ND	DATE			A	PPLI	CATI	٥.	DATE					
-									-									
ΕI	EP 1085011			A:	1	20010321			EP 2000-308049					20000915				
	R:	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙĘ,	SI,	LT,	LV,	FI,	RO											
ודי	JP 2001172244			Δ:	A2 20010626					P 20	00 - 2	8275	20000918					

PRAI US 1999-396523 A 19990915

AB Novel inhibitors of polyamine transport having inhibition consts. two orders of magnitude lower than those of known compds. are disclosed. These polyamine analogs are useful pharmaceutical agents for treating disease where it is desired to inhibit polyamine transport or other polyamine binding proteins, for example cancer and post-angioplasty injury. Novel chem. synthetic methods to obtain polyamine analogs are disclosed, including the prodn. of a combinatorial polyamine library. These approaches yield analogs with desirable activities both for diagnostic and research assays and therapy. The assays of the invention are useful for high throughput screening of targets in the discovery of drugs that interact with the polyamine system.

IT 220221-41-0P 287968-56-3P 330162-38-4P 330162-48-6P 330162-52-2P 330162-58-8P 330163-38-7P 330163-49-0P 330163-51-4P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of polyamines as therapeutic and diagnostic agents)

RN 220221-41-0 CAPLUS

CN Benzamide, N-[[5-[[6-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-6-oxohexyl]amino]sulfonyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

$$_{\text{H}_{2}\text{N}-\text{ (CH}_{2})_{3}-\text{NH}-\text{ (CH}_{2})_{4}-\text{NH}-\text{ (CH}_{2})_{3}-\text{NH}-\text{C}-\text{ (CH}_{2})_{5}-\text{NH}-\overset{\circ}{\underset{\circ}{\text{NH}}}\overset{\circ}{\underset{\circ}{\text$$

PAGE 1-B

RN 287968-56-3 CAPLUS

CN Benzamide, N-[[5-[[6-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-6-oxohexyl]amino]sulfonyl]-2-thienyl]methyl]-4-chloro- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-\operatorname{CH}_2-\operatorname{NH-C} \overset{\mathsf{O}}{\longrightarrow} \operatorname{C1}$$

RN 330162-38-4 CAPLUS

CN Benzamide, N-[[5-[[(21-amino-6-oxo-7,11,16,20-tetraazaheneicos-1-yl)amino]sulfonyl]-2-thienyl]methyl]-4-chloro- (9CI) (CA INDEX NAME)

PAGE 1-A

$$^{\circ}_{\text{H}_2\text{N}-\text{CH}_2-\text{NH}-\text{(CH}_2)}$$
  $^{\circ}_{3}-\text{NH}-\text{(CH}_2)}$   $^{\circ}_{4}-\text{NH}-\text{(CH}_2)}$   $^{\circ}_{3}-\text{NH}-\text{C}-\text{(CH}_2)}$   $^{\circ}_{5}-\text{NH}-\text{S}-\text{C}-\text{(CH}_2)}$ 

PAGE 1-B

RN 330162-48-6 CAPLUS

CN Benzamide, N-[[5-[[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-3-oxopropyl]amino]sulfonyl]-2-thienyl]methyl]-4-chloro- (9CI) (CA INDEX NAME)

PAGE 1-A

$$_{\text{H}_{2}\text{N}-\text{ (CH}_{2})_{3}-\text{NH}-\text{ (CH}_{2})_{4}-\text{NH}-\text{ (CH}_{2})_{3}-\text{NH}-\text{C}-\text{CH}_{2}-\text{CH}_{2}-\text{NH}-\text{S}}$$

PAGE 1-B

RN 330162-52-2 CAPLUS

CN Benzamide, N-[[5-[[[(1S)-1-[[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]carbonyl]-2-methylpropyl]amino]sulfonyl]-2-thienyl]methyl]-4-chloro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
  $(CH_2)_3$   $(CH_2)_4$   $(CH_2)_3$   $(CH_2)_3$   $(CH_2)_3$   $(CH_2)_4$   $(CH_2)_3$   $(CH_2)_4$   $(CH_2)_5$   $(C$ 

PAGE 1-B

RN 330162-58-8 CAPLUS

CN Benzamide, N-[[5-[[[(5S)-5-amino-6-[[3-[[4-[(3-

aminopropyl)amino]butyl]amino]propyl]amino]-6-oxohexyl]amino]sulfonyl]-2thienyl]methyl]-4-chloro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

$$H_2N$$
 $(CH_2)_3$ 
 $N$ 
 $H$ 
 $(CH_2)_4$ 
 $N$ 
 $H$ 
 $(CH_2)_3$ 
 $N$ 
 $H$ 
 $(CH_2)_4$ 
 $N$ 
 $H$ 
 $(CH_2)_4$ 
 $N$ 
 $H$ 
 $(CH_2)_4$ 
 $N$ 
 $H$ 

PAGE 1-B

RN 330163-38-7 CAPLUS

CN Benzamide, N,N'-[(6,21-dioxo-7,11,16,20-tetraaza-1,25-pentacosanediyl)bis(iminosulfonyl-5,2-thiophenediylmethylene)]bis[4-chloro-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-(CH_2)_4-NH-(CH_2)_3-NH-C-(CH_2)_4-NH-S$$

PAGE 1-C

RN 330163-49-0 CAPLUS

CN 2,6,11,15-Tetraazaheneicosanoic acid, 21-[[[5-[[(4-chlorobenzoyl)amino]methyl]-2-thienyl]sulfonyl]amino]-16-oxo-,

phenylmethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-NH-S \longrightarrow CH_2-NH-C$$

RN 330163-51-4 CAPLUS

CN 2,6,11,15-Tetraazaheneicosanoic acid, 21-[[[5-[[(4-chlorobenzoyl)amino]methyl]-2-thienyl]sulfonyl]amino]-16-oxo-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IT 220221-56-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of polyamines as therapeutic and diagnostic agents)

RN 220221-56-7 CAPLUS

CN Benzamide, 4-chloro-N-[[5-[[(6-oxo-7,11,16,20-tetraazadocos-1-yl)amino]sulfonyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

EtNH- 
$$(CH_2)_3$$
-NH-  $(CH_2)_4$ -NH-  $(CH_2)_3$ -NH-C-  $(CH_2)_5$ -NH-S

20000204

# RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4
     ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN
     2000:553544 CAPLUS
DN
     133:164201
ΤI
     Preparation of agmatine and polyamine analogs as antizyme modulators for
     use as drugs and agricultural agents
     Vermeulin, Nicolaas M. J.; Burns, Mark R.; Webb, Heather K.
IN
PA
     Oridigm Corporation, USA
SO
     PCT Int. Appl., 80 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 1
                      KIND DATE
                                             APPLICATION NO. DATE
     PATENT NO.
     WO 2000046187
                       A2
                             20000810
                                             WO 2000-US2972 20000204
PΙ
                             20001214
     WO 2000046187
                       A3
         W: AL, AM, AU, AZ, BA, BB, BG, BR, CA, CN, CU, CZ, EE, FI, GE, HU,
             IL, IS, JP, KG, KP, KR, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX,
             NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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EP 2000-913365

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, FI

JP 2002536357

T2 20021029

JP 2000-597259 20000204

PRAI US 1999-118892P

WO 2000-US2972

W 20000204

20011205

A polyamine analog of spermine comprising of four amine groups capable of AB forming four pos. charges at physiol. pH, wherein the first and second amine groups, and the third and fourth amine groups, are sepd. by the distance of four cC-C and or C-N bonds and the second and third amine are sepd. by the distance of five C-C and/or C-N bonds or more; wherein the the second and third amines are sepd. by a straight or branched C2-10-alkyl, -alkenyl, -alkynyl, alkoxy, aliph.; C3-10-alicyclic, single or multi-ring arom. or aryl; aryl-substituted alkyl, alkenyl, alkynyl; multiring aryl-substituted aliph.; aliph.-substituted single or multi-ring arom.; alkyl-, alkenyl-, alkynyl-substituted aryl; single or multi-ring heterocyclic; single or multi-ring heterocyclic-substituted aliph.; aliph.-substituted arom.; heterocyclic-substituted alkyl, alkenyl, alkynyl; alkyl-, alkenyl-, alkynyl-substituted heterocycle and wherein said analog induces expression of full-length antizyme. The present invention is directed to agmatine and polyamine analogs and their use as drugs, as well as agricultural or environmentally useful agents. As drugs, the analogs decrease cellular polyamine levels, possibly by inducing antizyme, and can be used to treat disorders of undesired cell proliferation, including cancer, viral infections and bacterial infections. The analogs may be utilized in pharmaceutical compns. either alone or in combination with other agents, particularly other inhibitors of polyamine synthesis or transport, but including other inhibitors of cell proliferation. The analogs are not necessarily metabolized to contribute to the polyamine pool and are designed to enter cells by

pathways independent of polyamine transport. The invention further defines structural elements/motifs within these analogs that are key to their induction of antizyme.

ΙT 287968-56-3P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of agmatine and polyamine analogs as antizyme modulators for use as drugs and agricultural agents)

287968-56-3 CAPLUS RN

Benzamide, N-[[5-[[6-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]ami CN no]-6-oxohexyl]amino]sulfonyl]-2-thienyl]methyl]-4-chloro- (9CI) INDEX NAME)

PAGE 1-A

$$H_2N-(CH_2)_3-NH-(CH_2)_4-NH-(CH_2)_3-NH-C-(CH_2)_5-NH-S$$

PAGE 1-B

ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS L4

1999:77533 CAPLUS ΑN

DN 130:153469

ΤI Novel polyamine analogs as therapeutic and diagnostic agents

Vermeulin, Nicolaas M. J.; O'Day, Christine L.; Webb, Heather K.; Burns, IN Mark R.; Bergstrom, Donald E.

PAOridigm Corporation, USA

SO PCT Int. Appl., 143 pp.

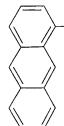
CODEN: PIXXD2

DT Patent

LA English

FAN.	CNT	1																		
	PATENT NO.					KIND		DATE			PPLI	CATI	N NC	ο.	DATE					
PI	WO	9903823			A2		19990128			WO 1998-US14896 19980715										
	WO	9903823			<b>A</b> 3		19990408													
		W:	AL,	AM,	AU,	ΑZ,	BA,	BB,	BG,	BR,	CA,	CN,	CU,	CZ,	EE,	FI,	GE,	HU,		
			IL,	IS,	JP,	KG,	KΡ,	KR,	LC,	LK,	LR,	LT,	LV,	MD,	MG,	MK,	MN,	MX,		
			NO,	NZ,	PL,	RO,	SG,	SI,	SK,	TR,	TT,	UA,	US,	UΖ,	VN,	AM,	AZ,	BY,		
			KG,	ΚŹ,	MD,	RU,	TJ,	TM												
		RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	ŪĠ,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,		
			FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,		
			CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG								
	ΑU	U 9884968			A:	l	1999	0210		AU 1998-84968 19980715										
	ΑU	U 758570			B	2	2003	0327												
	EP	2 1001927			A2 20000524			0524		EP 1998-935790 19980715										
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,		
	IE, FI																			
	JP 2001510181			T2		20010731			JP 2000-503054 19980715											
	US 6172261			В:	l	20010109			US 1999-341400 19990903											

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PRAI US 1997-52586P P 19970715
US 1997-65728P P 19971114
US 1998-85538P P 19980515
WO 1998-US14896 W 19980715
OS MARPAT 130:153469
GI
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NHCONHCH2CH2CH2NHCH2CH2CH2CH2NHCH2CH2CH2NH2

Title inhibitors RXR1 [ R =H, or is a head group consisting of a straight AB or branched C1-10 aliph., alicyclic, single or multiring arom., single or multiring aryl substituted aliph., etc.; R1 is a polyamine; X = CO, NHCO, NHCS, SO2] and pharmaceutical acceptable salts of polyamine transport having inhibition consts. two orders of magnitude lower than those of known compds. are disclosed. These polyamine analogs are useful pharmaceutical agents for treating diseases where it is desired to inhibit polyamine transport or other polyamine binding proteins, for example cancer and post-angioplasty injury and the introduction of a 3-amidopropyl group to the diaminobutyl part of spermidine produce a significantly better transport inhibitor. Novel chem. synthetic methods to obtain polyamine analogs are disclosed, including the prodn. of a combinatorial polyamine library. These approaches yield analogs with desirable activities both for diagnostic and research assays and therapy. The assays of the invention are useful for high throughput screening of targets in the discovery of drugs that interact with the polyamine system. Thus, I was prepd. from 1-aminoanthracene, 4-nitrophenyl chloroformate,

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#### 220221-41-0P 220221-56-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. of polyamines as therapeutic and diagnostic agents)

RN 220221-41-0 CAPLUS

and spermine.

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CN Benzamide, N-[[5-[[6-[[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]amino]-6-oxohexyl]amino]sulfonyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

RN 220221-56-7 CAPLUS

CN Benzamide, 4-chloro-N-[[5-[[(6-oxo-7,11,16,20-tetraazadocos-1-yl)amino]sulfonyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

EtNH- 
$$(CH_2)_3$$
-NH-  $(CH_2)_4$ -NH-  $(CH_2)_3$ -NH-  $(CH_2)_5$ -NH-

PAGE 1-B

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2001:228868 CAPLUS
AN
DN
     134:252356
     Preparation of 2-(arylamino)-4-quinazolinols as inhibitors of cleavage of
ΤI
     protein substrates by caspase-3
     Jacobs, Robert Toms; Folmer, James; Simpson, Thomas Richard; Chaudhari,
ΙN
     Bipinchandra; Frazee, William Jackson; Davenport, Timothy Wayne
     Astrazeneca AB, Swed.; Astrazeneca UK Limited
PA
SO
     PCT Int. Appl., 71 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
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ΡI
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             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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                                           EP 2000-958907
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             IE, SI, LT, LV, FI, RO, MK, CY, AL
                                            JP 2001-524977
     JP 2003509501
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                                                             20000918
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                                            US 2000-668322
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PRAI US 1999-155623P
                       Р
                            19990923
                            20000918
     WO 2000-GB3555
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     MARPAT 134:252356
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AB I (e.g. [2-[(3,4-dichlorophenyl)amino]-4-hydroxy-6-nitroquinazolin-8-yl]-N[(4-fluorophenyl)methyl]carboxamide) or a pharmaceutically-acceptable salt
thereof and methods of using such compds. for the treatment of various
diseases and pharmaceutical compns. comprising such compds. are claimed.
In I, R2 is H, acetyl or (C1-C5)alkyl. R4 is H, acetyl or (C1-C5)alkyl.
R5, R6 and R7 are independently H, halogen, (C1-C2)alkyl,
halo(C1-C2)alkyl, nitro and cyano. R8 is H, Ph, (C1-C6)alkyl, Ri,
heterocycle, substituted heterocycle, -(CH2)mC(O)N-[(CH2)pRg]Rb,
-(CH2)mN[(CH2)pRg]Rb, -CH:CHRC, halogen, -(CH2)mC(O)(CH2)mRo, -C(O)Rp,
-(CH2)mC(O)O[(CH2)pRg], -(CH2)mN[(CH2)pRg]C(O)Rb, -(CH2)mOC(O)[(CH2)pRg],
-CHORdORe, -CH2XRf, -S(O)2N[(CH2)pRg]Rb, -N[(CH2)pRg]S(O)2Rb,
-S(O)2N[(CH2)pRg]Rb, -C(O)H, allyl and 4-hydroxybut-1-en-4-yl. R3', R4'
and R5' are independently H, halogen, (C1-C4)alkyl, (C1-C4)alkoxy and

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halo(C1-C4)alkyl; wherein at least one of R5, R6, R7, R8, R3' and R5' is not H; and R4' is not equal to R7. Rb is H, (C1-C4)alkyl or substituted (C1-C4) alkyl. Rc is H, Ph, Ri, heterocycle, substituted heterocycle, -CO2Rb, -C(0)NRbRb, -S(0)n-Rf, 2-hydroxyisopropyl and cyano. Rd and Re are independently (C1-C4)alkyl; or Rd and Re together are -CH2CH2- or -CH2CH2CH2-. Rf is (C1-C4)alkyl, vinyl, -CH2CO2Rb, Ph or benzyl. Rg is (C1-C10)alkyl, substituted (C1-C10)alkyl, Ph, Ri, heterocycle, substituted heterocycle, -ORb, -NRbRb, -NRjRo, -N(Rj)SO2Rj, -CO2Rb, -C(O)NRjRj, -SO2phenyl and 2-oxopyrrolid-1-yl; or Rg and Rb together form -CH2CH2N(Rj)CH2CH2-, -(CH2)4-, -CH(Rh)CH2CH2CH2-, or -CH2CH2OCH2CH2-. is -CO2Rf or -CH2O-Ph. Ri is Ph, contg. 1-3 substituents selected from halogen, (C1-C6)alkyl, -ORj, -O(substituted phenyl)-NRjRj, halo(C1-C6)alkyl, halo(C1-C4)alkoxy, nitro, -C(O)Rj, -C(O)(substituted phenyl), -(CH2)mC(O)NRjRk, -(CH2)mC(O)N(Rj)SO2[(C1-C6)alkyl],-(CH2)mC(0)NRj(substituted phenyl), -(CH2)mCO2Rj, -OC(0)Rj, -N(Rj)C(0)Rj, -NRjC(0) halo (C1-C4) alkoxy, -C(0) NRjRj, -NRjS(0) 2 (C1-C4) alkyl, -SOn(C1-C6)alkyl, -SOn(halogen), -SOm(CH2)nphenyl, -SO2NRjRj, -SO2NRjRk, -SO2NRj(substituted (C1-C6)alkyl), -SO2(CH2)nRo, -SO2N(Rj)(CH2)nRo, -SOn(halo(C1-C3)alkyl), -SOn(pyrrolidin-1-yl substituted in the 2 position by Rn), -CN, -SCN, Ph, heterocycle and benzyl. Rj is H or (C1-C6)alkyl. Rk is -(CH2)nCH2OCH2Rb, -C(0)NRjRj or -C(0)Rj. Rm is heterocycle, contq. one or two substituents selected from halogen, (C1-C6)alkyl, -ORj, -O(substituted phenyl)-NRjRj, halo(C1-C6)alkyl, halo(C1-C4)alkoxy, nitro, -C(O)Rj, -C(O)(substituted phenyl), -(CH2)mC(O)NRjRk, -(CH2)mC(0)N(Rj)SO2[(C1-C6)alkyl], -(CH2)mC(0)NRj(substituted phenyl),-(CH2) nCO2Rj, -OC(O)Rj, -N(Ri)C(O)Rj, -NRjC(O)-halo(C1-C4)alkoxy,-C(0) NRjRj, -NRjS(0) 2 (C1-C4) alkyl, -SOn(C1-C6) alkyl, -SOn(halogen)-SOm(CH2) nphenyl, -SO2NRjRj, -SO2NRjRk, -SO2NRj(substituted (C1-C6) alkyl), -SO2(CH2)nRo, -SO2N(Rj)(CH2)nRo, -SOn(halo(C1-C3)alkyl),-SOn(pyrrolidin-1-yl substituted in the 2 position by Rn), -CN, -SCN, Ph, heterocycle and benzyl. Rn is -C(O)Rj, -CH2ORj or -C(O)NRjRj. Ro is Ph, substituted Ph, heterocycle or substituted heterocycle. Rp is a heterocycle contg. one or two substituents selected from substituted Ph, heterocycle, Ph, benzyl, -SOnRo or SO2NRjRj. M is 0-3; n is 0-2; p is 0-7; X is S, O or N. A method is claimed of treating a mammalian disease selected from cell apoptosis, immune deficiency syndromes, autoimmune diseases, pathogenic infections, cardiovascular and neurol. injury, alopecia, aging, cancer, Parkinson's disease, Alzheimer's disease, Huntington's disease, acute and chronic neurodegenerative disorders, stroke, vascular dementia, head trauma, ALS, neuromuscular disease, myocardial ischemia, cardiomyopathy, macular degeneration, osteoarthritis, diabetes, acute liver failure and spinal cord injury. Although caspase-3 inhibition and apoptosis assay methods are described, quant. assay results are not given. Although the methods of prepn. are not claimed, 17 example prepns. are included.

## 331643-41-5P

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CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 2-(arylamino)-4-quinazolinols as inhibitors of cleavage of protein substrates by caspase-3)

331643-41-5 CAPLUS

8-Quinazolinecarboxamide, N-[2-[[(2-amino-2-oxoethyl)amino]sulfonyl]phenyl]-2-[(3,4-dichlorophenyl)amino]-1,4-dihydro-6-nitro-4-oxo- (9CI) (CA INDEX NAME)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT